

WHAT IS CLAIMED IS:

1. A method for controlling a decoder when a first data and a second data are
5 successively received in a mobile communication system, comprising the steps of:
 - a) decoding the first data;
 - b) determining whether the completion status of the decoder is; and
 - c) interrupting the decoding of the first data at a predetermined time before
a response (ACK/NAK) time delay of the first data expires if the decoder is still in
10 operation to decode the first data at a decoding start time of the second data.
2. The method as set forth in claim 1, further comprising the step of:
 - d) decoding the second data.
- 15 3. The method as set forth in claim 1, further comprising the step of:
 - d) finishing the first data decoding operation, and storing the first data
decoding result if the first data decoding operation is normally completed before
the response (ACK/NAK) time expires.
4. The method as set forth in claim 1, wherein the mobile communication
system is receiving a control message and at the same time receiving a data.
5. The method as set forth in claim 1, wherein the response (ACK/NAK)
time delay is at least 2-slots.
- 20 6. The method as set forth in claim 1, wherein the predetermined time is

determined to allow a decoding time of the first data to be equal to that of the second data.

7. The method as set forth in claim 1, wherein the predetermined time is determined to allocate a decoding time of individual data in proportion to individual
5 data size of the first data and the second data.

8. The method as set forth in claim 1, wherein the predetermined time, upon receipt of information indicative of initial transmission or re-transmission of individual data, is determined to allow a decoding time of initial transmission data to be longer than that of re-transmission data.

10 9. A computer readable medium of instructions to control a decoder when a first data and a second data are successively received in a mobile communication system, the computer readable medium of instructions comprising:

a first set of instructions to control the decoder to decode a first data;

a second set of instructions to control the decoder to determine whether the
15 completion status of the decoder is; and

a third set of instructions to control the decoder to interrupt the decoding of the first data of the decoder at a predetermined time before a response (ACK/NAK) time delay of the first data expires if the decoder is still in operation to decode the first data at a decoding start time of the second data.

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10. The computer readable medium of instructions as set forth in claim 9, further comprising a forth set of instructions to control the decoder to decode the second data.

11. The computer readable medium of instructions as set forth in claim 9, further comprising a forth set of instructions to control the decoder to finish the first data decoding operation and store the first data decoding result if the first data
5 decoding operation is normally completed before the response (ACK/NAK) time expires.

12. The computer readable medium of instructions as set forth in claim 9, wherein the mobile communication system is receiving a control message and at the same time receiving a data.

13. The computer readable medium of instructions as set forth in claim 9, wherein the response (ACK/NAK) time delay is at least 2-slots.

14. The computer readable medium of instructions as set forth in claim 9, wherein the predetermined time of the third set of instructions is determined to
10 allow a decoding time of the first data to be equal to that of the second data .

15. The computer readable medium of instructions as set forth in claim 9, wherein the predetermined time of the third set of instructions is determined to allocate a decoding time of individual data in proportion to individual data size of the first data and the second data.

15 16. The computer readable medium of instructions as set forth in claim 9, wherein the predetermined time of the third set of instructions, upon receipt of information indicative of initial transmission or re-transmission of individual data,

is determined to allow a decoding time of initial transmission data to be longer than that of re-transmission data.